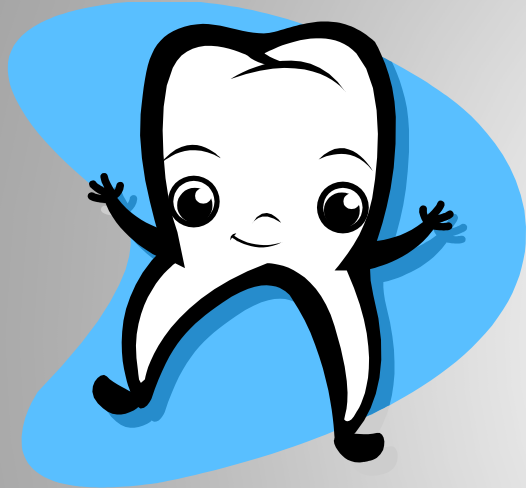


PROVIDING FLUORIDE VARNISH APPLICATION IN THE PRIMARY CARE SETTING



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IMPORTANCE OF TOPIC

- ⦿ most common disease in young children
- ⦿ impacts 40% of age 2-11
- ⦿ 80% experienced by 25% of children
- ⦿ poor 3-5X more likely to have decay that goes untreated.

TOOTH DECAY PROGRESSION

Age 2	11%
Age 3	21%
Age 4	34%
Age 5	55%

progression and cumulative disease increases with age.

NEGATIVE SEQUELAE

- ⦿ failure to thrive in infants
- ⦿ poor school performance in children due to missed school days
 - 51,000,000 hours missed annually in our country due to oral-health related illness.

DENTAL CARE GUIDELINES

Children at high risk for caries receive topical fluoride beyond that available in fluoridated water and toothpaste by age 1 or with 1st tooth.

American Dental Association (ADA)

American Academy of Pediatric Dentists (AAPD)

STUDY AIMS

- ◉ Assess uptake of program
(how implemented and sustained)
- ◉ Assess feasibility of long term follow up
- ◉ Create an analysis plan
- ◉ Survey providers
(attitudes/perspectives)

METHODS

- ⦿ Children 1-5, government program insured, seen for a well-child visit between 7/1/2010- 1, 4/30/2012
- ⦿ Data on age, race, sex, clinic encounter, eligibility for and receipt of FV
- ⦿ Determined % w/comprehensive, partial and minimal coverage in: primary, specialty, urgent care and hospitalizations
- ⦿ Provider survey by E-mail

STATISTICAL METHODS

- ◉ Chi-square assessed differences in FV by age, race and sex
- ◉ Frequencies used in the survey portion
- ◉ Statistical analyses were performed using SAS for Windows, version 9.2.
- ◉ P-values of <0.05 were considered statistically significant

RESULTS

- ⦿ Program Implementation:
12,067 children met eligibility criteria 85% of children received FV
- ⦿ Over 80% of all races received FV
- ⦿ No differences found by sex

RECEIPT OF FV BY AGE OF CHILD AT FIRST ELIGIBLE VISIT

	Receipt of FV	
	Total	% receiving FV application
Age		
1	4667	93.9
2	1540	87.4
3	1996	86.0
4	1951	81.3
5	1913	65.3 * (p<0.001)

RECEIPT OF FV BY RACE

	FV Receipt	
	Total	% receiving FV application
Race		
White	3503	83.2
Black	4519	87.6
Asian/Hawaiian	1058	83.9
Native American	94	80.9
Other	434	84.6
Mixed	537	86.4
Unknown	1922	83.8

FEASIBILITY TO TRACK A PATIENTS OVER TIME

- Ability to track these children over time was mixed.
- Less than 50% had comprehensive data.
- However, it was possible to obtain PC visits and hospitalizations on a larger percentage.

UTILIZATION PERCENTAGES BY MONTHS OF CARE COVERAGE

Health plan coverage months/quarters	Frequency 4 month	%	Frequency 12 month	%
0	5749	37.6	4150	34.4
1	458	3.0	499	4.1
2	790	5.2	687	5.7
3	1688	11.0	1359	11.3
4	6613	43.2	5355	44.4
Total	15,298	100	12,050	100

UTILIZATION PERCENTAGES BY MONTHS OF CARE COVERAGE (12 MONTH GROUP)

Type of Encounter	0 months (n=4150)	1-3 months (n=499)	4-6 months (n=687)	7-9 months (n=1359)	10-12 months (n=5355)
Primary Care	98.6	98.4	99.3	98.7	99.5
Urgent Care	23.5	19.0	24.5	30.8	38.8
Hospital Outpatient/Emergency Room/Same Day Surgery	2.5	15.2	28.5	36.4	46.6
Hospital Inpatient	14.2	10.0	11.4	13.1	22.5
Specialty/Other Care	17.8	24.2	31.1	35.3	43.2

SURVEY RESULTS

We targeted 86 providers and received response from 43 (50%).

- ◉ Majority (72%) reported initiative very important
- ◉ 76% report a FV done by both MDs and nurses usually at the end of the well-child visit
- ◉ Application 1-3 minutes
- ◉ FV served as catalyst for discussion on oral health

ORAL HEALTH EDUCATION AT THE TIME OF FLUORIDE VARNISH APPLICATIONS (N=43 TOTAL)

Topic	All / most of the time	Some of the time	Never	Missing
Parents given FV application instruction sheet	79%	19%	0	2%
Review risk factors for caries	58%	37%	2%	2%
Parents provided information on oral health	58%	35%	5%	2%
Parents asked if child has seen a dentist	93%	2%		5%
Parents informed where to seek dental care	37%	53%	7%	2%

CHALLENGES TO IMPLEMENTATION OF FV INITIATIVE (TOTAL N-43)

Challenge mentioned	N=
No challenges	19
Time to apply FV	11
Time to assess/counsel	8
Child's fear or resistance	7
Parent refusal to allow	6
Lack of provider training	3
Lack of educational material	2

CONCLUSIONS

- ◉ FV can be introduced and sustained in the PC setting
- ◉ Long-term follow up of at risk children, while challenging, is possible
- ◉ Future study needed capturing health and cost benefits of oral health prevention efforts for those most vulnerable is needed.